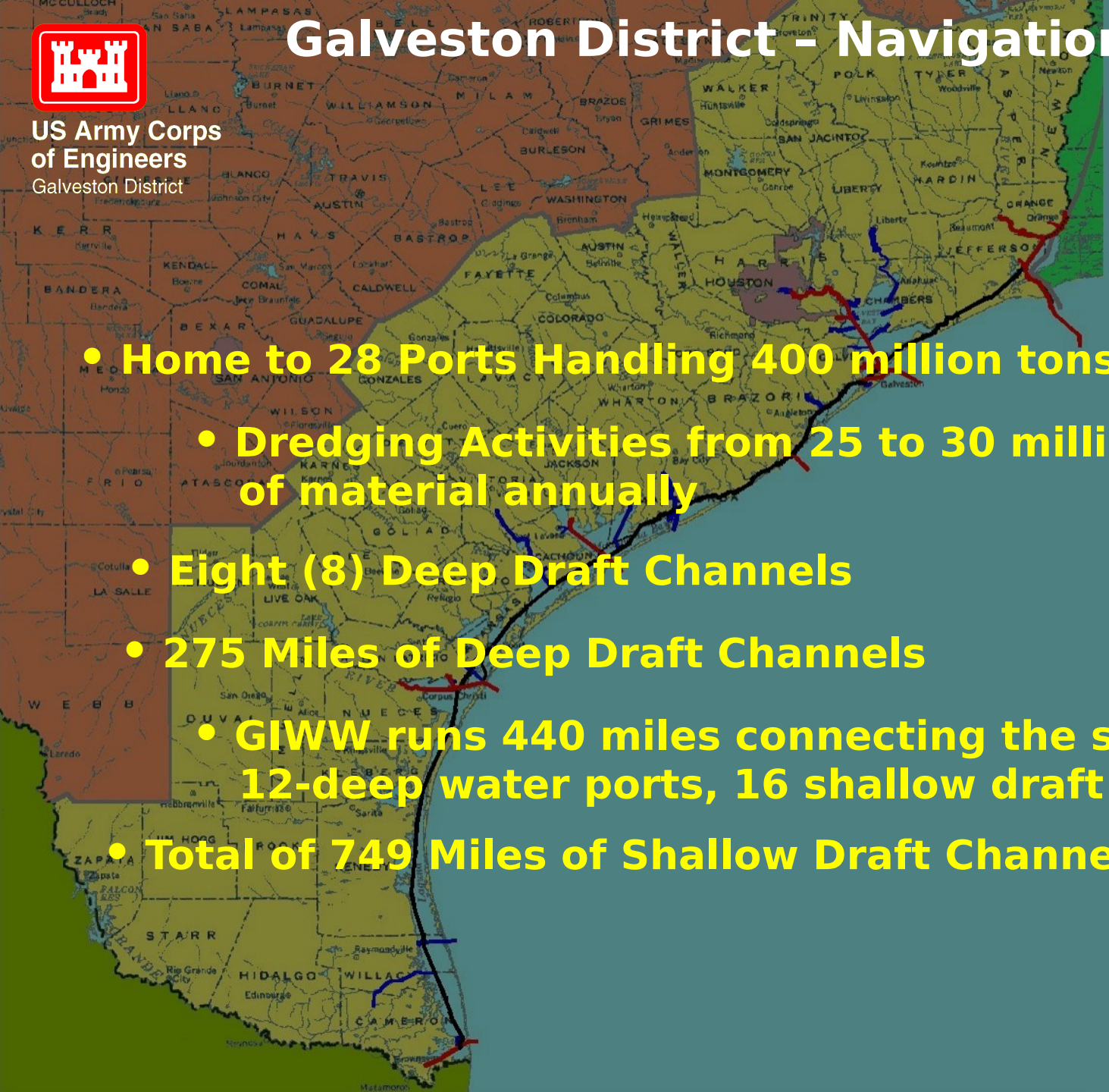
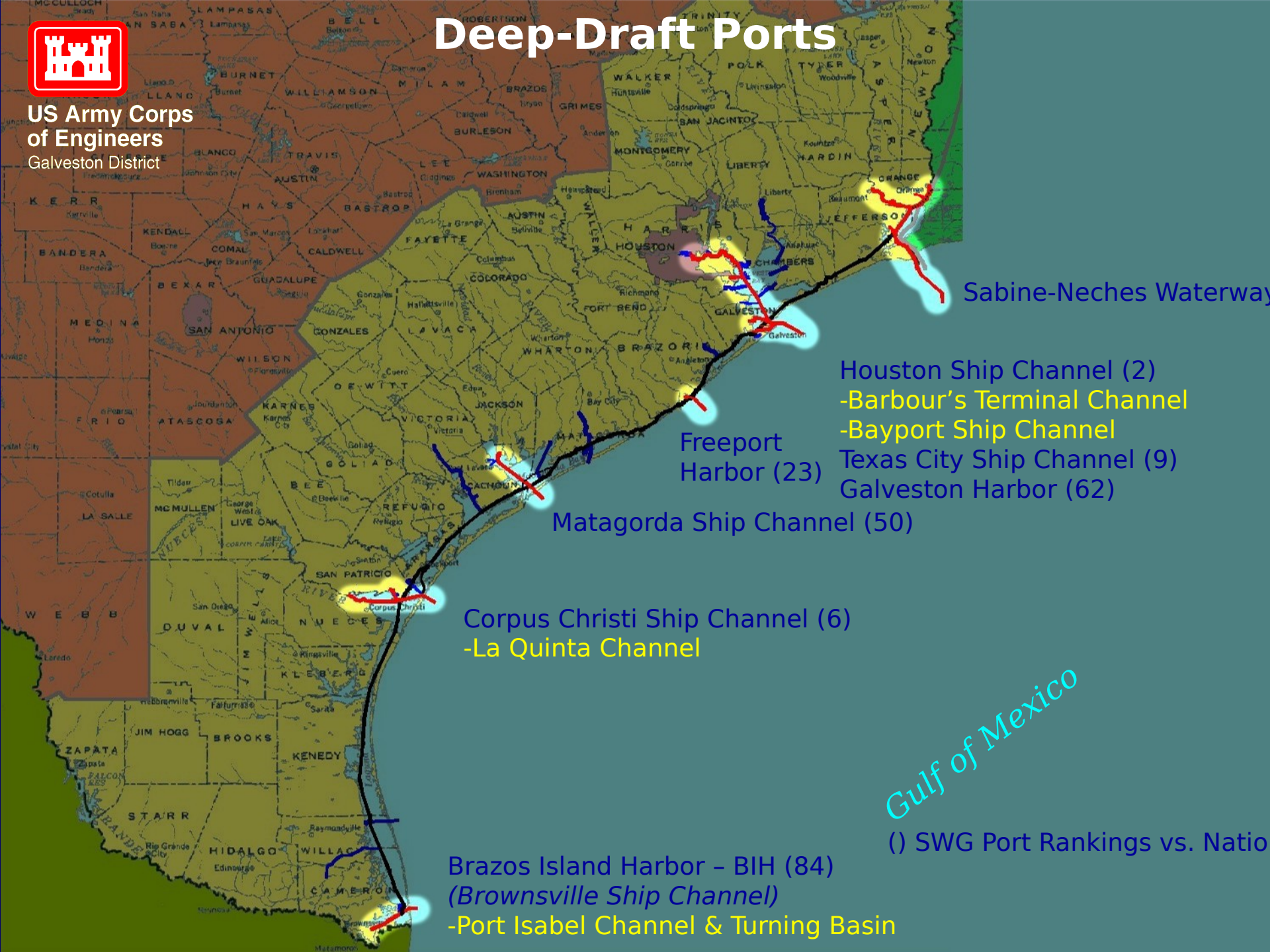
Galveston District – Navigation Projects

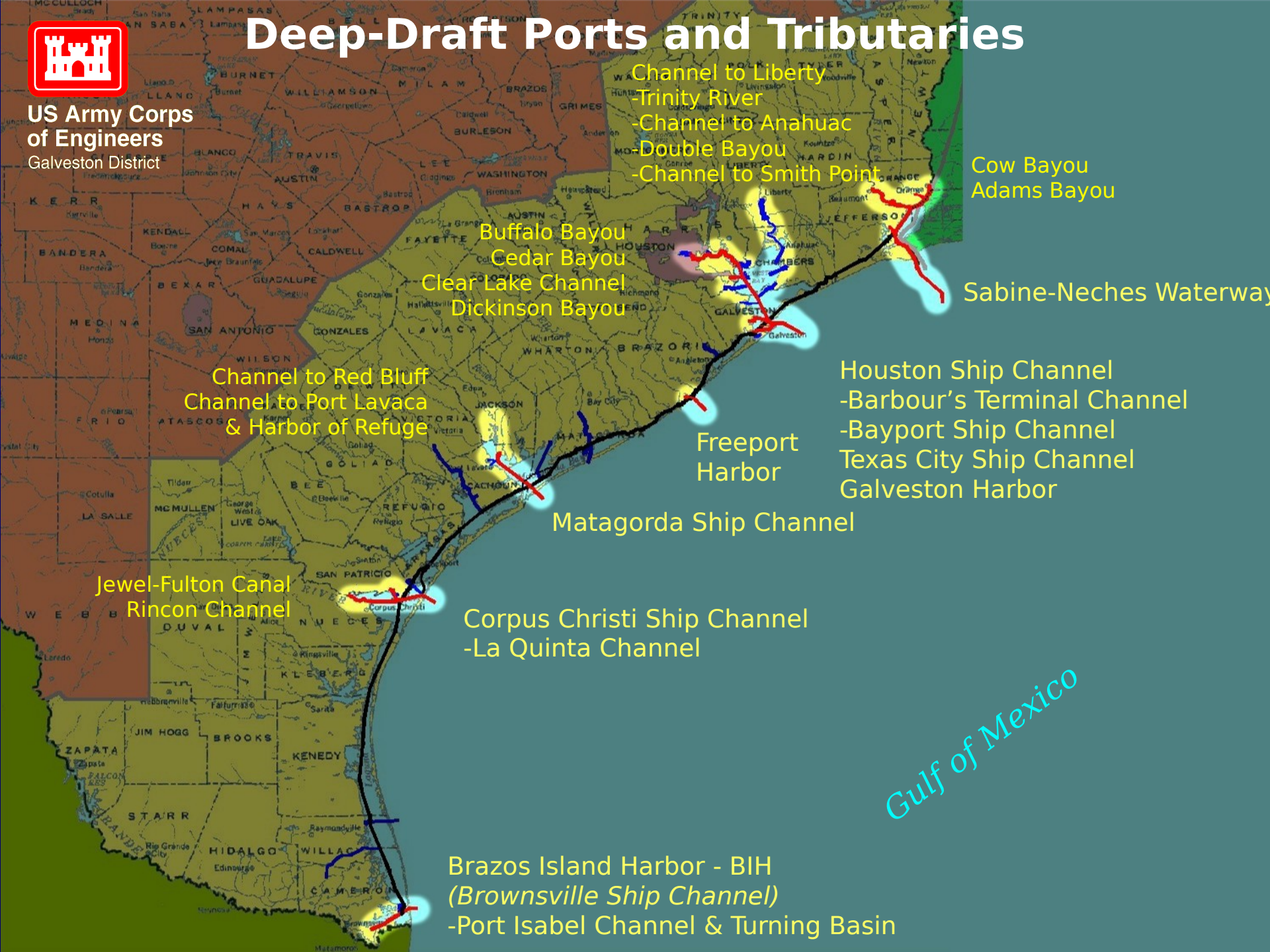
US Army Corps of Engineers
Galveston District



- Home to 28 Ports Handling 400 million tons of commerce
- Dredging Activities from 25 to 30 million cubic yards of material annually
- Eight (8) Deep Draft Channels
- 275 Miles of Deep Draft Channels
- GIWW runs 440 miles connecting the state's 12-deep water ports, 16 shallow draft ports
- Total of 749 Miles of Shallow Draft Channels

Deep-Draft Ports




Deep-Draft Ports and Tributaries
US Army Corps of Engineers
Galveston District
Channel to Liberty
-Trinity River
-Channel to Anahuac
-Double Bayou
-Channel to Smith Point
Cow Bayou
Adams Bayou
Buffalo Bayou
Cedar Bayou
Clear Lake Channel
Dickinson Bayou
Sabine-Neches Waterway
Houston Ship Channel
-Barbour's Terminal Channel
-Bayport Ship Channel
Texas City Ship Channel
Galveston Harbor
Channel to Red Bluff
Channel to Port Lavaca
& Harbor of Refuge
Freeport
Harbor
Matagorda Ship Channel
Jewel-Fulton Canal
Rincon Channel
Corpus Christi Ship Channel
-La Quinta Channel
Gulf of Mexico
Brazos Island Harbor - BIH
(Brownsville Ship Channel)
-Port Isabel Channel & Turning Basin

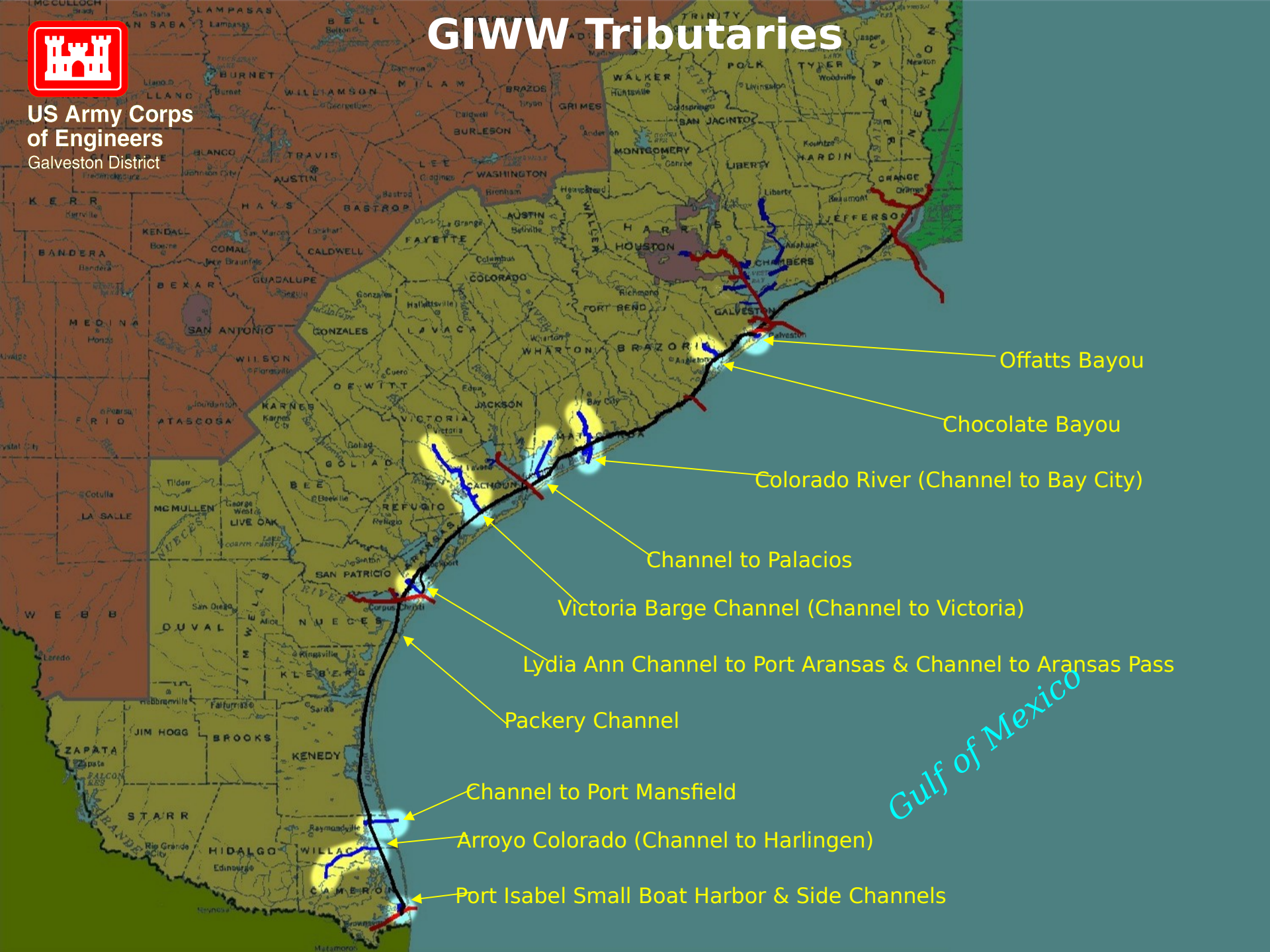
Gulf Intracoastal Waterway - GIWW

US Army Corps of Engineers
Galveston District

** Major GIWW Reach Limits*

GIWW Tributaries

US Army Corps of Engineers
Galveston District


Offatts Bayou
Chocolate Bayou
Colorado River (Channel to Bay City)
Channel to Palacios
Victoria Barge Channel (Channel to Victoria)
Lydia Ann Channel to Port Aransas & Channel to Aransas Pass
Packery Channel
Channel to Port Mansfield
Arroyo Colorado (Channel to Harlingen)
Port Isabel Small Boat Harbor & Side Channels
Gulf of Mexico

FY06 Awarded Jobs

JOB NAME	Award Date	Quantity Cubic Yds.	Contractor
GIWW-Main Ch in Matagorda	11/22/2005	525,000	T.W.LAQUAY DREDGING, INC
BIH -Main Ch & Turning Basin	12/29/2005	945,300	T.W.LAQUAY DREDGING, INC
SNWW-PA Canal & Junction	10/18/2005	467,900	KING FISHER MARINE SERV., INC.
Freeport-Entrance Ch	12/22/2005	1,815,500	BEAN STUYVESANT, LLC
MSC-Matagorda Peninsula	12/29/2005	3,791,000	T.W.LAQUAY DREDGING, INC
Victoria-Middle Reach	12/28/2005	535,000	KING FISHER MARINE SERV., INC.
GIWW-High Island Rollover	2/24/2006	1,387,000	KING FISHER MARINE SERV., INC.
GIWW-Main Ch in Aransas Bay	3/10/2006	986,000	KING FISHER MARINE SERV., INC.
TX. City Ch. & Turning Basin	3/15/2006	1,250,000	KING FISHER MARINE SERV., INC.
HSC-HSC & Adjoining Channels	4/27/2006	2,959,100	T.W.LAQUAY DREDGING, INC
GIWW-Turnstake to Live Oak	5/17/2006	870,372	RLB CONTRACTING, INC.
GIWW-Freeport Harbor to Braz	5/18/2006	600,200	KING FISHER MARINE SERV., INC.
SNWW - Lower Neches	5/31/2006	1,772,200	Weeks Marine, Inc.,
Galveston-Entrance&Jetty Ch	5/31/2006	1,600,000	Manson

FY06 Upcoming Jobs

JOB NAME	Advertise	Bid Open	Award Date	Quantity Cubic Yds.
Victoria-Lower Reach	3/23/2006	4/25/2006	8/8/2006	1,628,000
Ch to Pt.Mansfiled-Nt.Jetty	3/27/2006	4/26/2006	TBD*	373,185
SNWW-Outer Bar & Bank	5/11/2006	6/13/2006	6/28/2006	1,200,000
HGNC-Redfish to Morgan's Pt	5/23/2006	6/22/2006	6/28/2006	4,000,000
MOC-Entrance Ch & Imp. Basin	11/15/2004	3/21/2006	TBD**	320,000
CCSC-Entrance Ch	5/31/2006	6/16/2006	6/30/2006	150,000

*Bid Cancelled due to funding, will be re-scoped and resolicitated.

**Low Bidder exceeded funds available for work. Pursuing alternate methods to perform work.

FY07 Projects

Name	Advertise Date	Bid Opening	Contract Date	CY
BIH Jetty Channel	4/27/2006	5/26/2006	6/19/2006	600,000
SNWW Port Arthur Junction Area & TB	7/14/2006	8/17/2006	9/6/2006	1,000,000
FH Entrance Channel	8/1/2006	9/1/2006	9/26/2006	1,500,000
GIWW Maint. (N) Boggy Bayou to Upper Matagorda Bay	9/8/2006	10/10/2006	11/1/2006	2,000,000
GIWW Maint. (S) Main Channel in Matagorda Bay & alt. route	9/11/2006	10/12/2006	11/3/2006	400,000
Channel to Port Bolivar	9/18/2006	11/15/2006	12/6/2006	70,000
GIWW Maint. (N) Rollover Pass to Port Bolivar	9/18/2006	11/15/2006	12/6/2006	1,000,000
GIWW Maint. (S) Corpus Christi Bay to PI Phase 1	9/20/2006	10/23/2006	11/7/2006	2,000,000
HSC Exxon to Carpenter's Bayou	9/22/2006	11/1/2006	11/22/2006	1,000,000
GIWW Maint. (N) Brazos River to Boggy Bayou	10/3/2006	11/2/2006	11/24/2006	2,000,000
MSC - Galinipper Point to Point Comfort	10/25/2006	11/29/2006	12/25/2006	2,500,000
CCSC Entrance Channel	11/2/2006	12/6/2006	1/27/2006	1,800,000
CCSC La Quinta to Beacon 82	11/2/2006	12/6/2006	1/27/2006	1,900,000
MSC - Entrance Channel Repair	12/20/2006	1/25/2006	2/15/2007	400,000
CV - Upper Reach	1/2/2007	2/5/2007	2/28/2007	2,300,000

US Army Corps
of Engineers
Galveston District

SWG

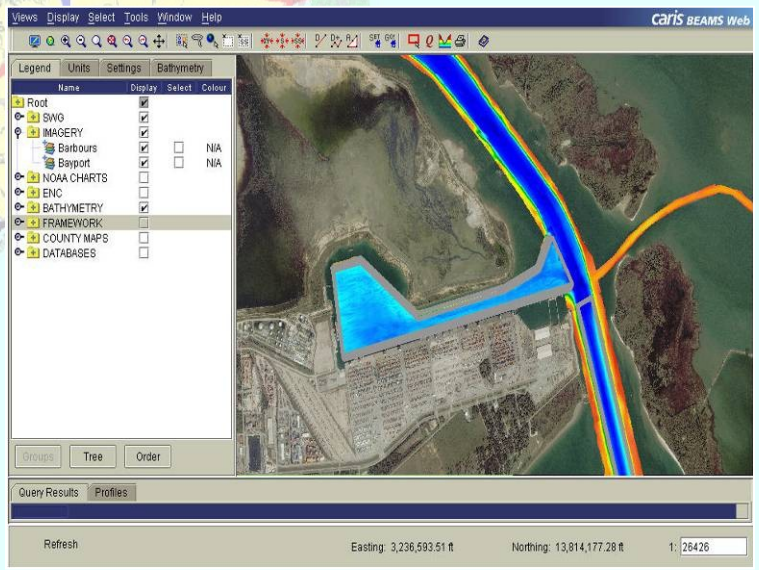
Galveston District Initiatives…

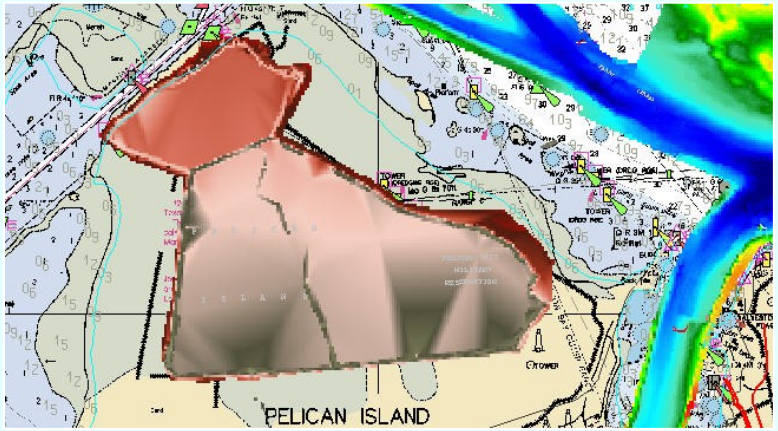
US Army Corps of Engineers
Galveston District

BEAMS

Bathymetric Engineering And Management System

- A single standardized application for the management of spatial information along waterways, ports and harbors
- An operational tool for planning, monitoring, and decision making
- A presentation tool
- Galveston BEAMS Web Site
- http ://beams.swg.usace.army.mil

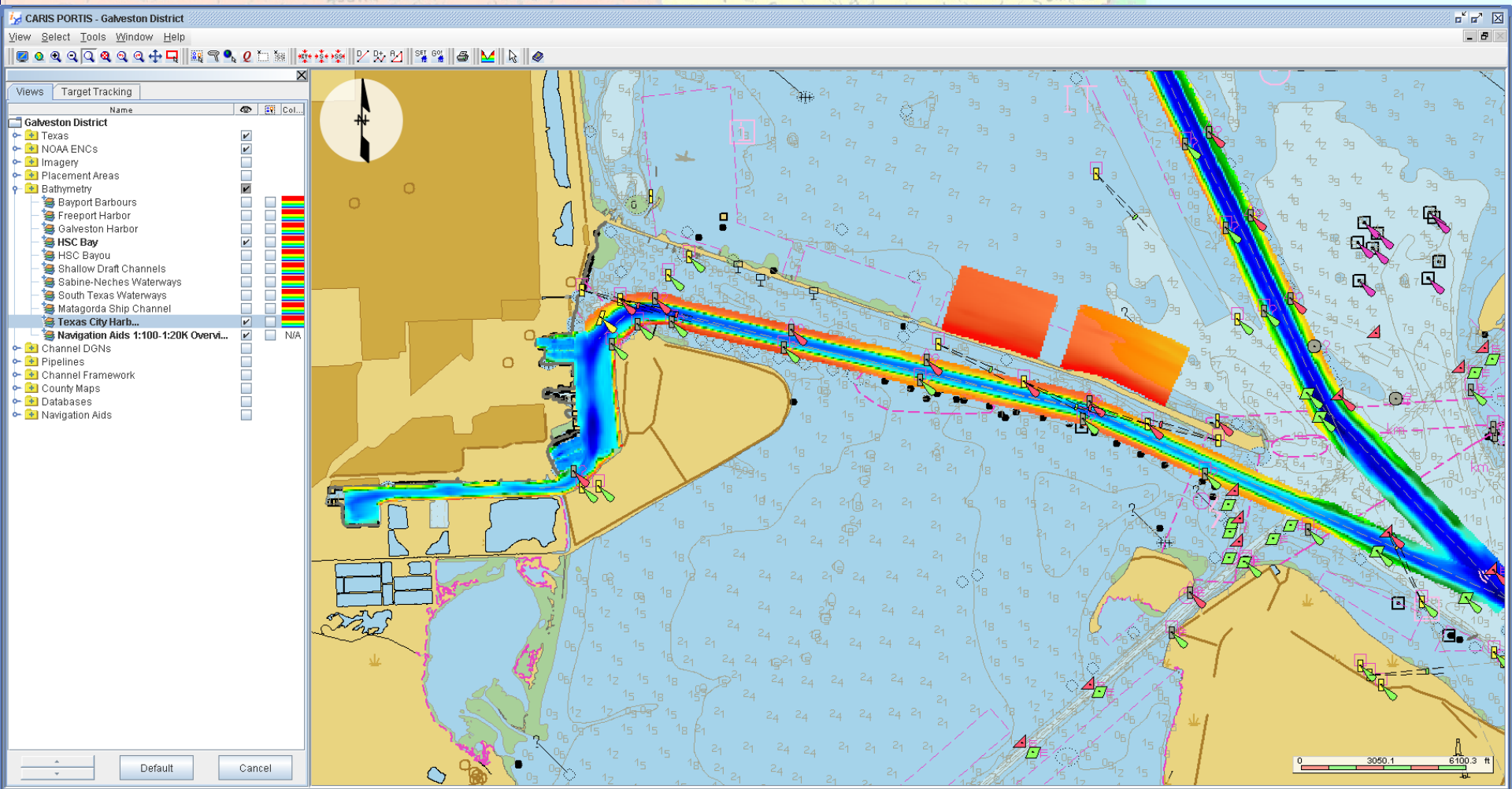




BEAMS

Bathymetric Engineering And Management System

US Army Corps of Engineers
Galveston District

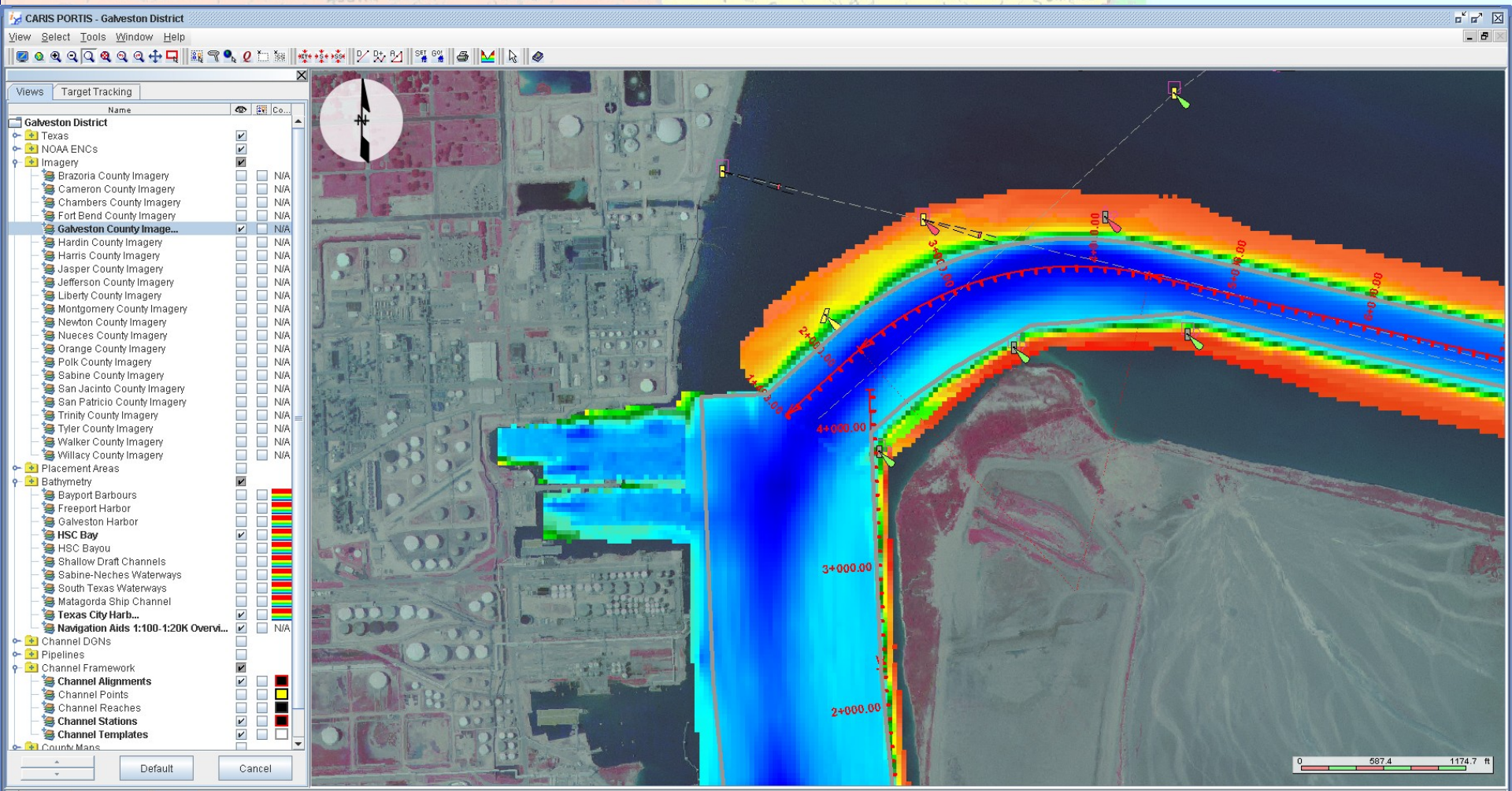


Overview of Texas City Ship Channel
Showing most recent surveys. *(9-Jun-06)*

BEAMS

Bathymetric Engineering And Management System

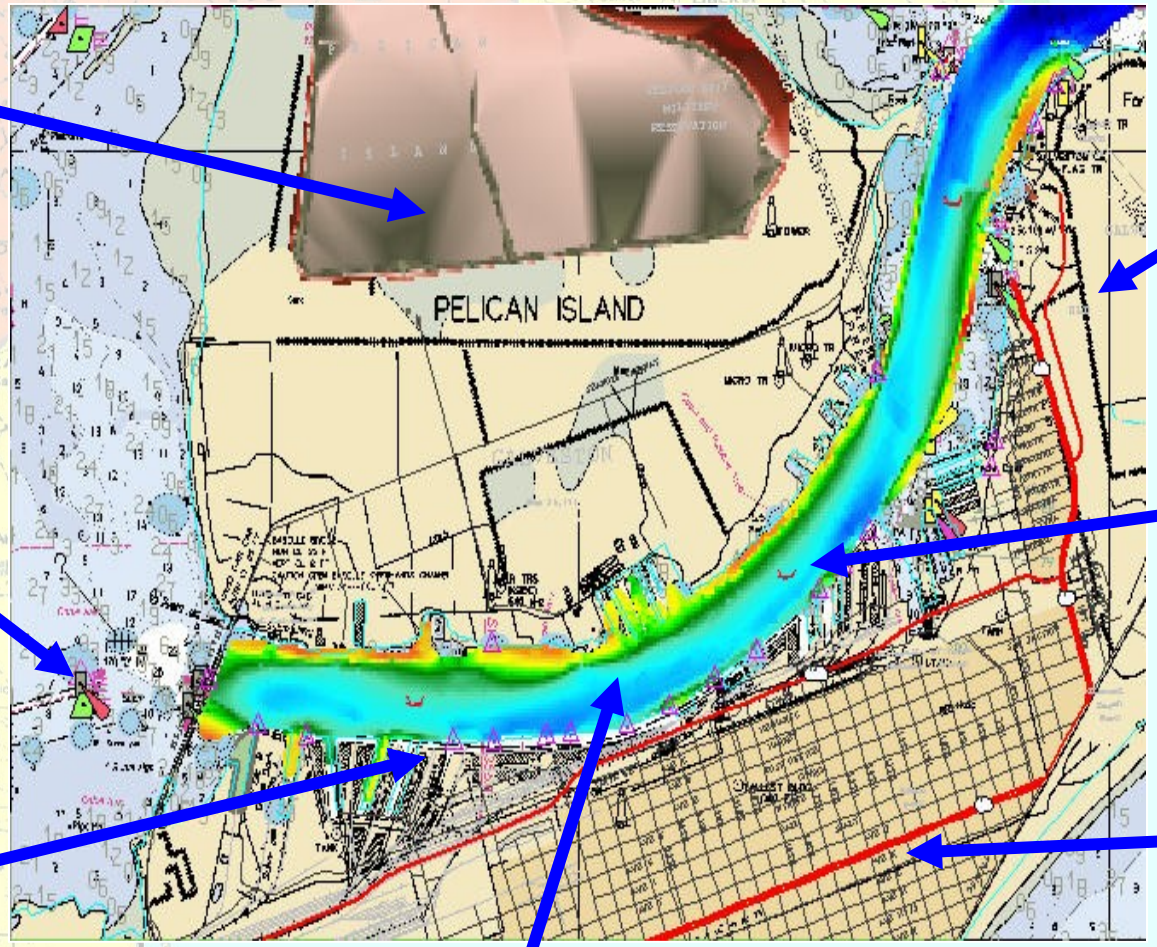
US Army Corps of Engineers
Galveston District



Detailed view of Texas City Ship Channel
Showing most recent surveys & Orthophotography. *(9-Jun-06)*

US Army Corps of Engineers
Galveston District

BEAMS
Multi Map & Format Support



LIDAR (WGS 84)

S-57 (WGS 84)

Monument Database

BSB (Mercator)

Shoal Database

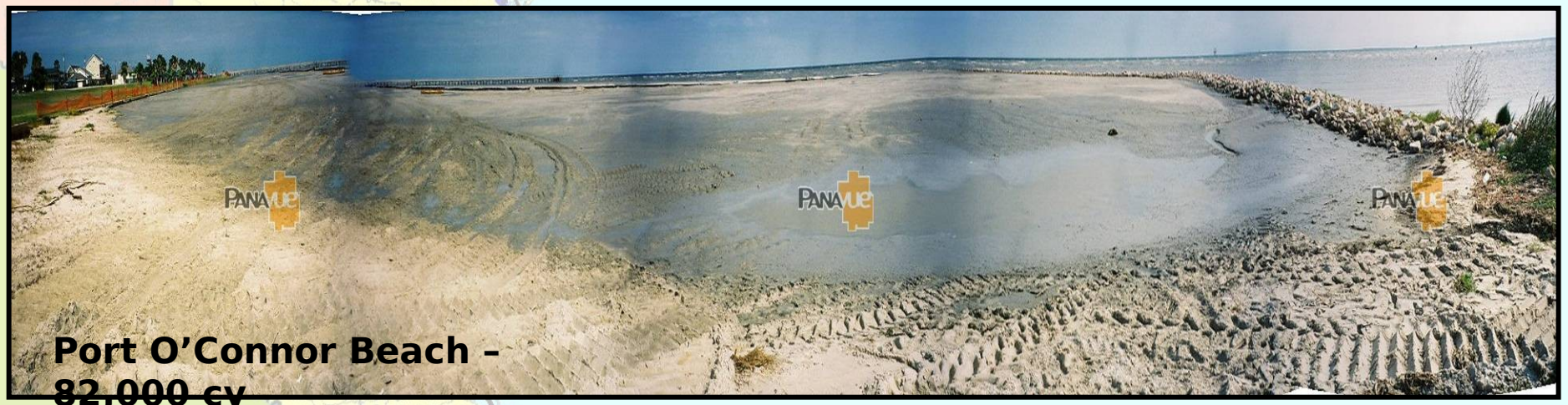
DGN (NAD 83)

Bathymetry (US State Plane NAD 27 & NAD 83)

Beneficial Use of Dredge Material

Beach Nourishment

US Army Corps
of Engineers
Galveston District



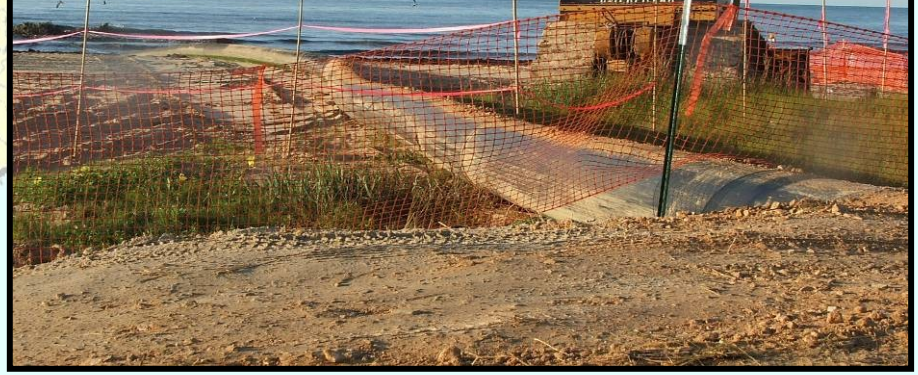
US Army Corps
of Engineers
Galveston District

Beneficial Use of Dredge Material

Bird Island Nourishment

Sundown Island (Brown Pelican) – 97,000 cy

Sargent Beach Plover Habitat - 182,000 cy



Bird Island, PA 220, Laguna Madre

568,000 cy

Rock Breakwater protecting Bird Island

US Army Corps of Engineers
Galveston District

Beneficial Use of Dredge Material

Houston-Galveston Nav. Channel (HGNC)

Working to Limit Turtle Takings

US Army Corps of Engineers
Galveston District

Kemp's Ridley
Opinion - 7
FY06 - 0

Hawksbill
Opinion - 1
FY06 - 0

Green
Opinion - 5
FY06 - 4

Loggerhead
Opinion - 15
FY06 - 0

US Army Corps
of Engineers
Galveston District

Did You Know…

- **Top 10 Lists (2004 Waterborne Statistics)**
  - Leading U.S. Ports in Foreign & Domestic Trade
    Houston, Beaumont, Corpus Christi, and Texas City
  - U.S. Ports Foreign Waterborne In-transits
    Brownsville and Houston
- **2 Strategic Ports**
  Beaumont and Corpus Christi
- **Texas #1 in Domestic & Foreign Waterborne Traffic**
  (531M short tons)
- **Texas portion of GIWW accounts for 58.61% of total tonnage**

US Army Corps of Engineers
Galveston District

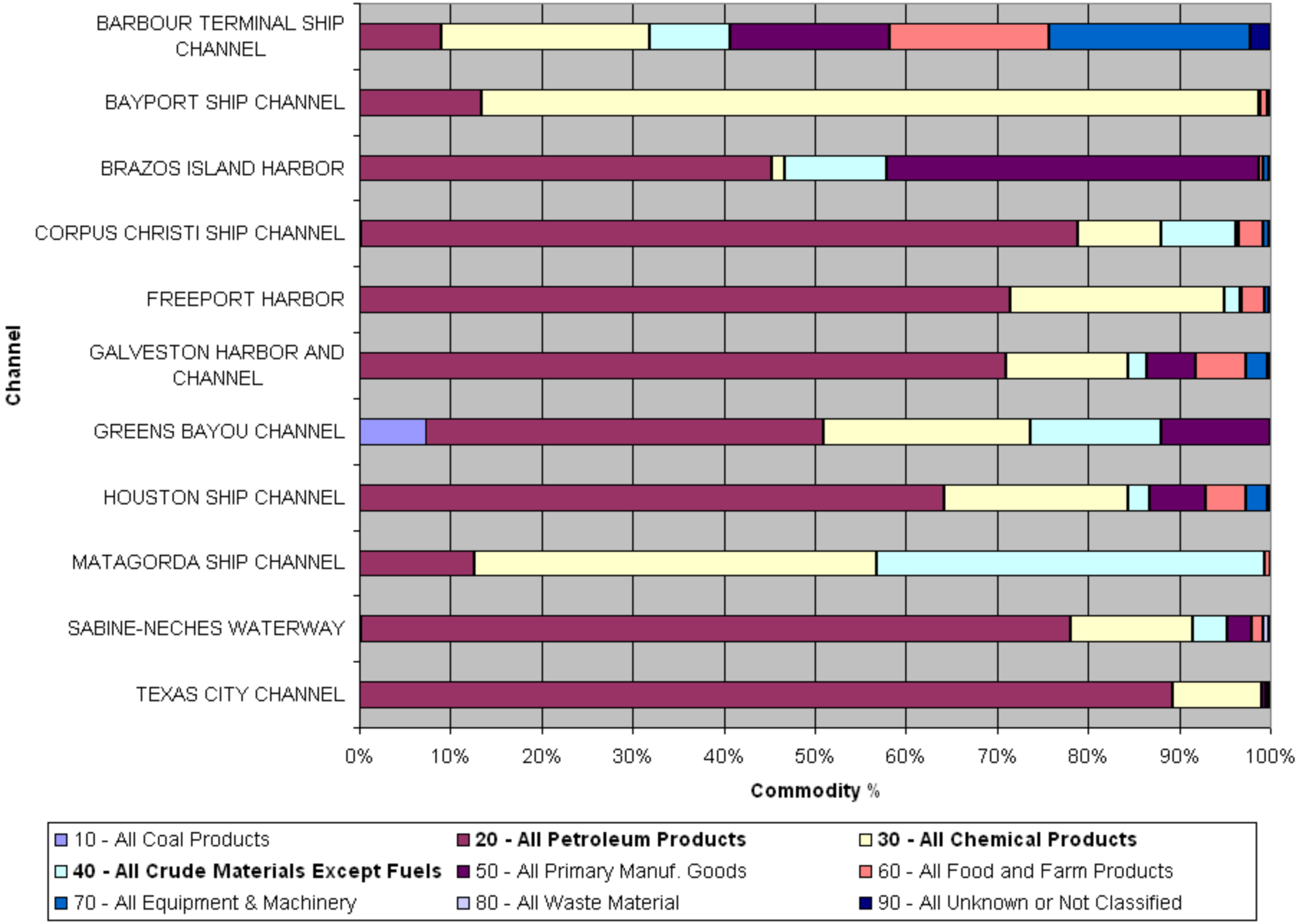
SWG Port Rankings vs. The Nation

Rank	Port Name	Grand Total (1000 short tons)
1	South Louisiana, LA, Port of	224,187
2	**Houston, TX**	**202,047**
3	New York, NY and NJ	152,378
4	**Beaumont, TX**	**91,698**
5	Long Beach, CA	79,708
6	**Corpus Christi, TX**	**78,925**
7	New Orleans, LA	78,085
8	Huntington -Tristate	77,308
9	**Texas City, TX**	**68,283**
10	Baton Rouge, LA	57,083
11	Mobile, AL	56,212
12	Lake Charles, LA	54,768
13	Plaquemines, LA, Port of	54,405
14	Los Angeles, CA	51,363
15	Tampa, FL	48,289
16	Baltimore, MD	47,399
17	Valdez, AK	46,758
18	Duluth-Superior, MN and WI	45,393
19	Pittsburgh, PA	41,032
20	Philadelphia, PA	35,220
23	**Freeport, TX**	**33,908**
29	**Port Arthur, TX**	**27,570**
50	**Matagorda Ship Channel, TX**	**12,524**
62	**Galveston, TX**	**8,113**
84	**Brownsville, TX**	**4,171**
91	**Victoria, TX**	**3,712**

*** 2004 Waterborne Commerce Port Ranking by Total Tons*

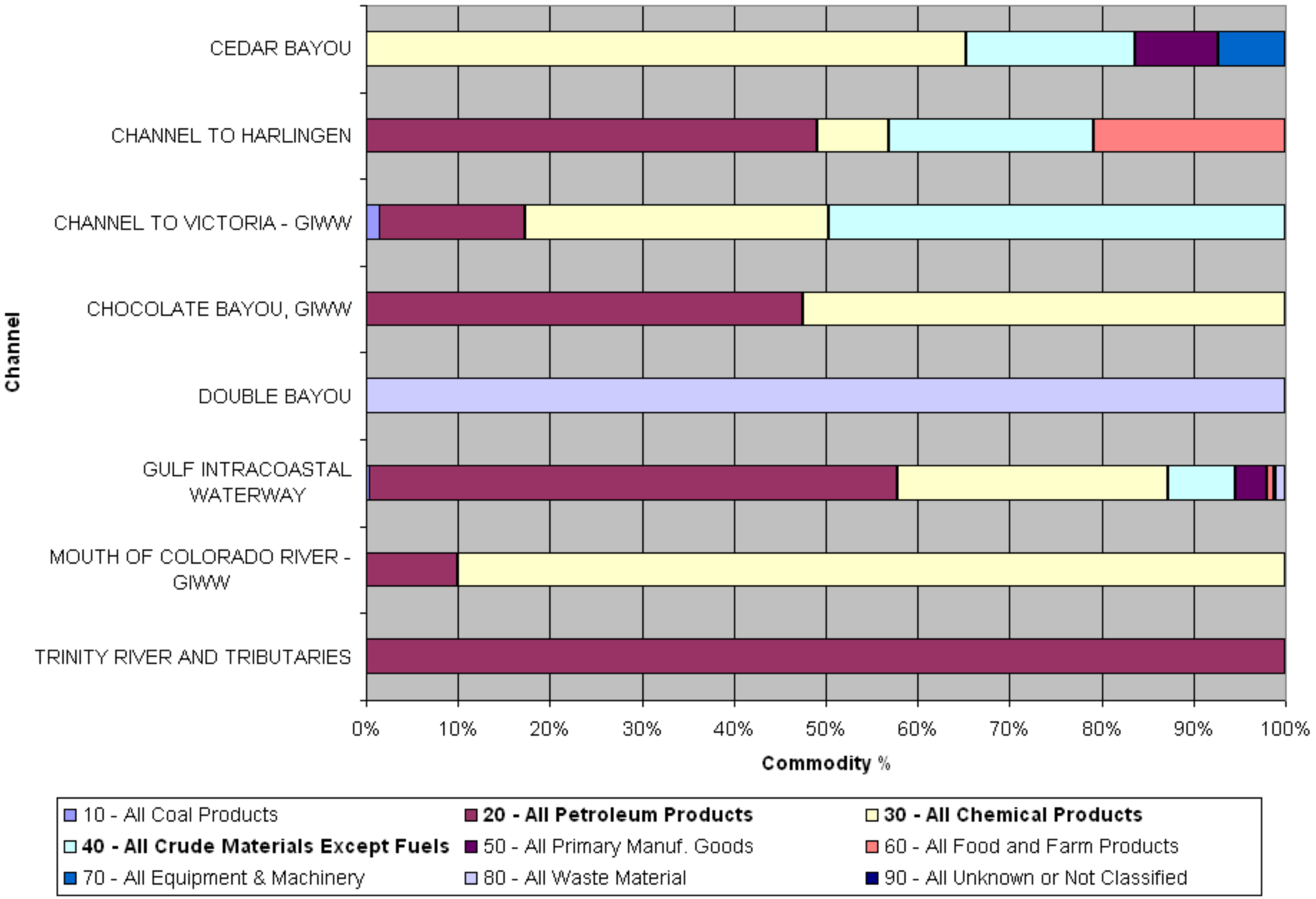
Commodity by Channel – Deep Draft

*** from OMBIL 9-Jun-06*



Commodity by Channel – Shallow Draft

*** from OMBIL 9-Jun-06*



US Army Corps of Engineers
Galveston District

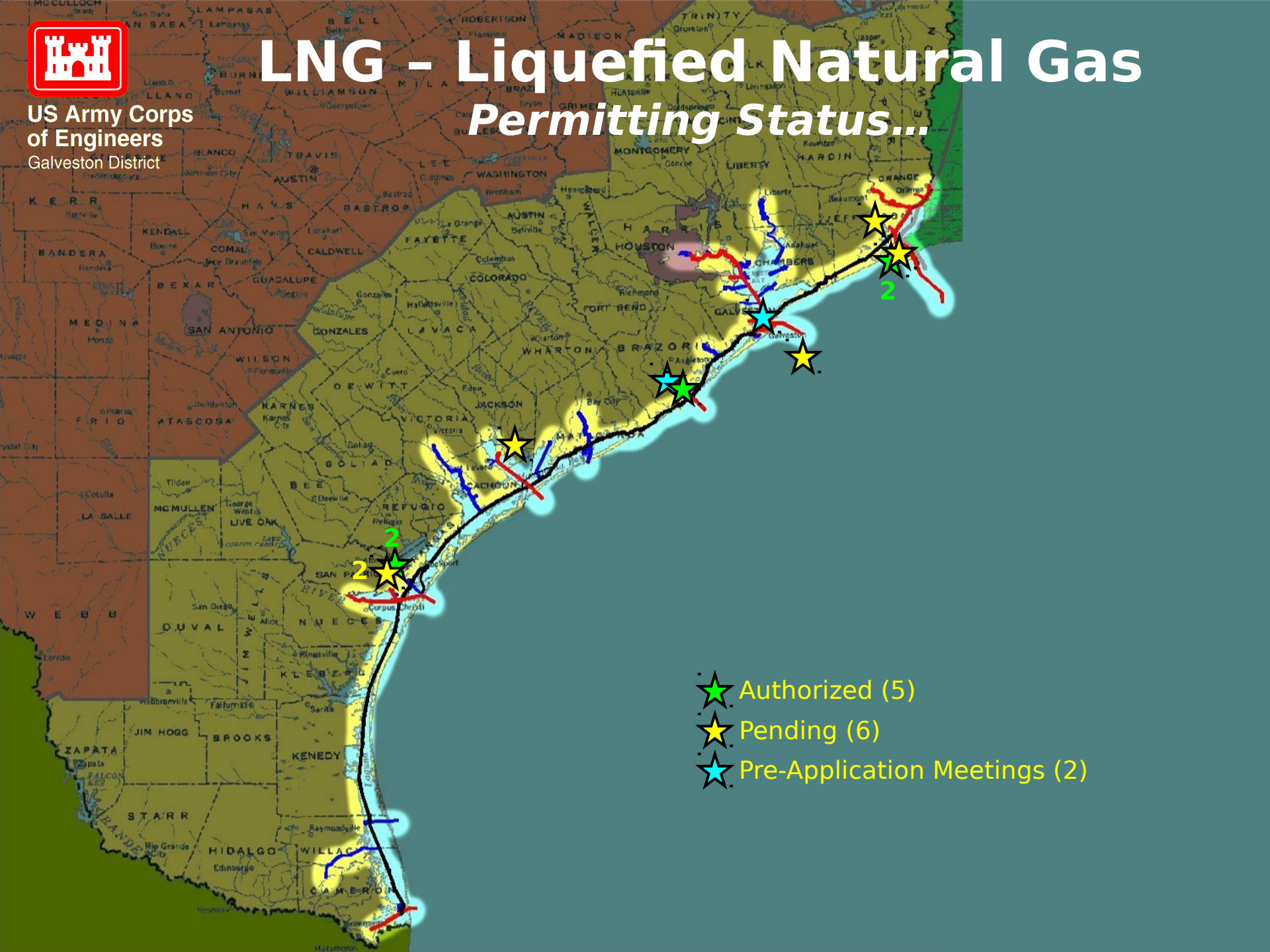
Communication Plans with Local Sponsors & Stakeholders

- Budget Process
- 5-Year Budget Plans
- PRB (monthly) & Annual District Dredging Conference
- Sponsor Participation in PDTs

US Army Corps
of Engineers
Galveston District

LNG – Liquefied Natural Gas

Permitting Status…

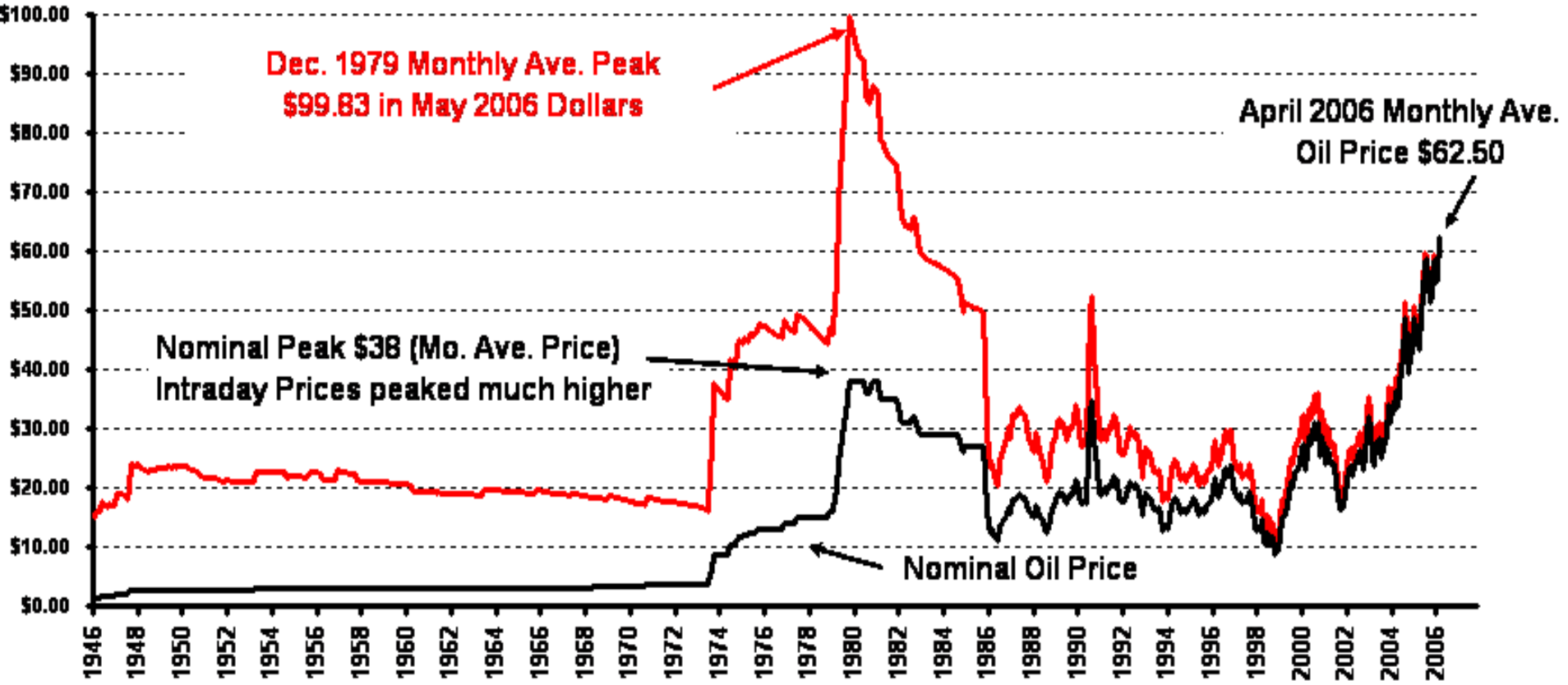


Inflation Adjusted Monthly CRUDE OIL PRICES (1946- Present)

In May 2006 Dollars

© www.InflationData.com

Updated 5/18/06



Nominal Monthly Ave. Oil Price

Inflation Adjusted Monthly Average Oil Price

Source of Data:

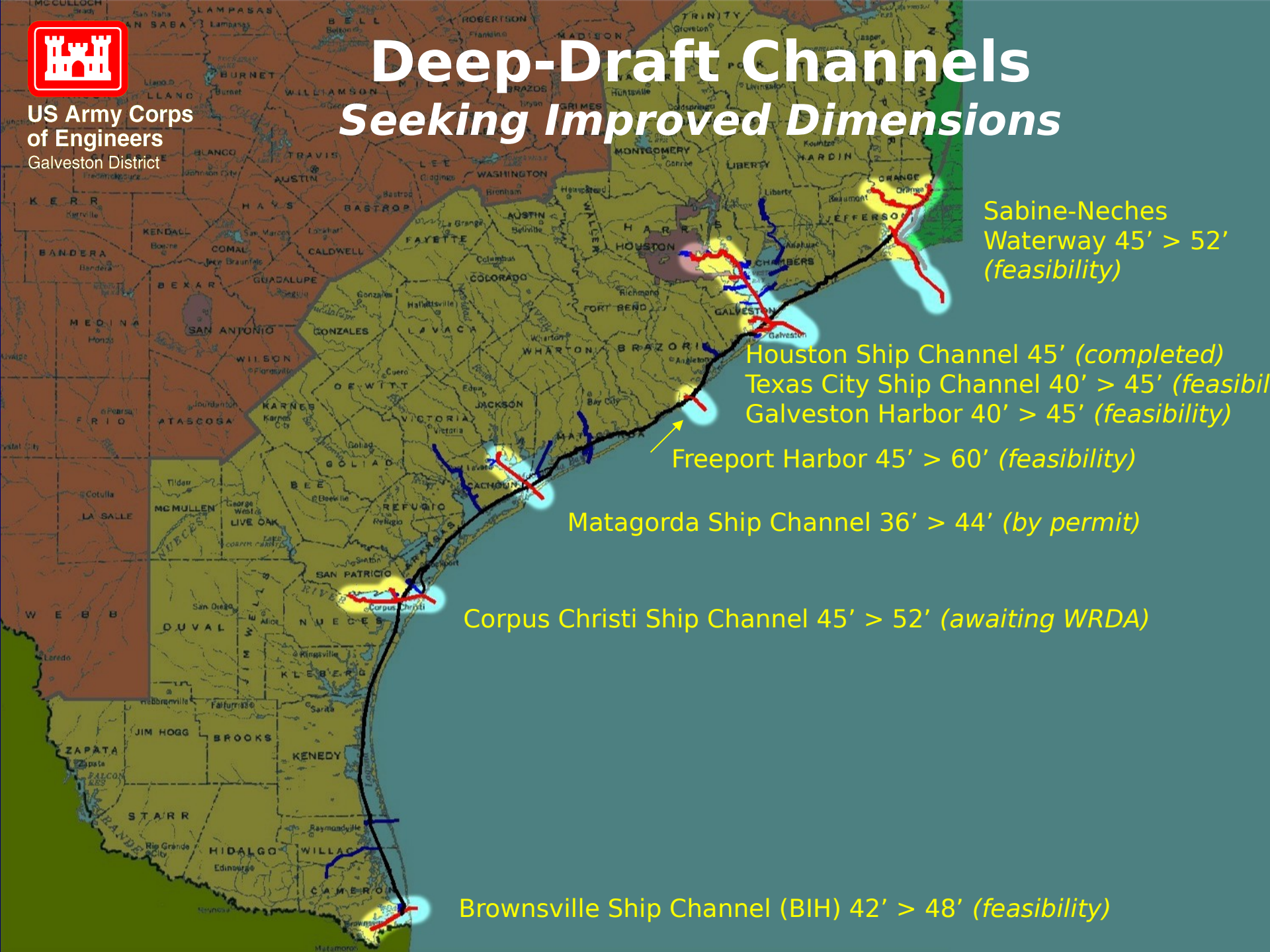
Illinois Basin Crude Prices- www.ioga.com/Special/crudeoil_Hist.htm

CPI-U Inflation index- www.bls.gov

US Army Corps of Engineers
Galveston District

Deep-Draft Channels

Seeking Improved Dimensions

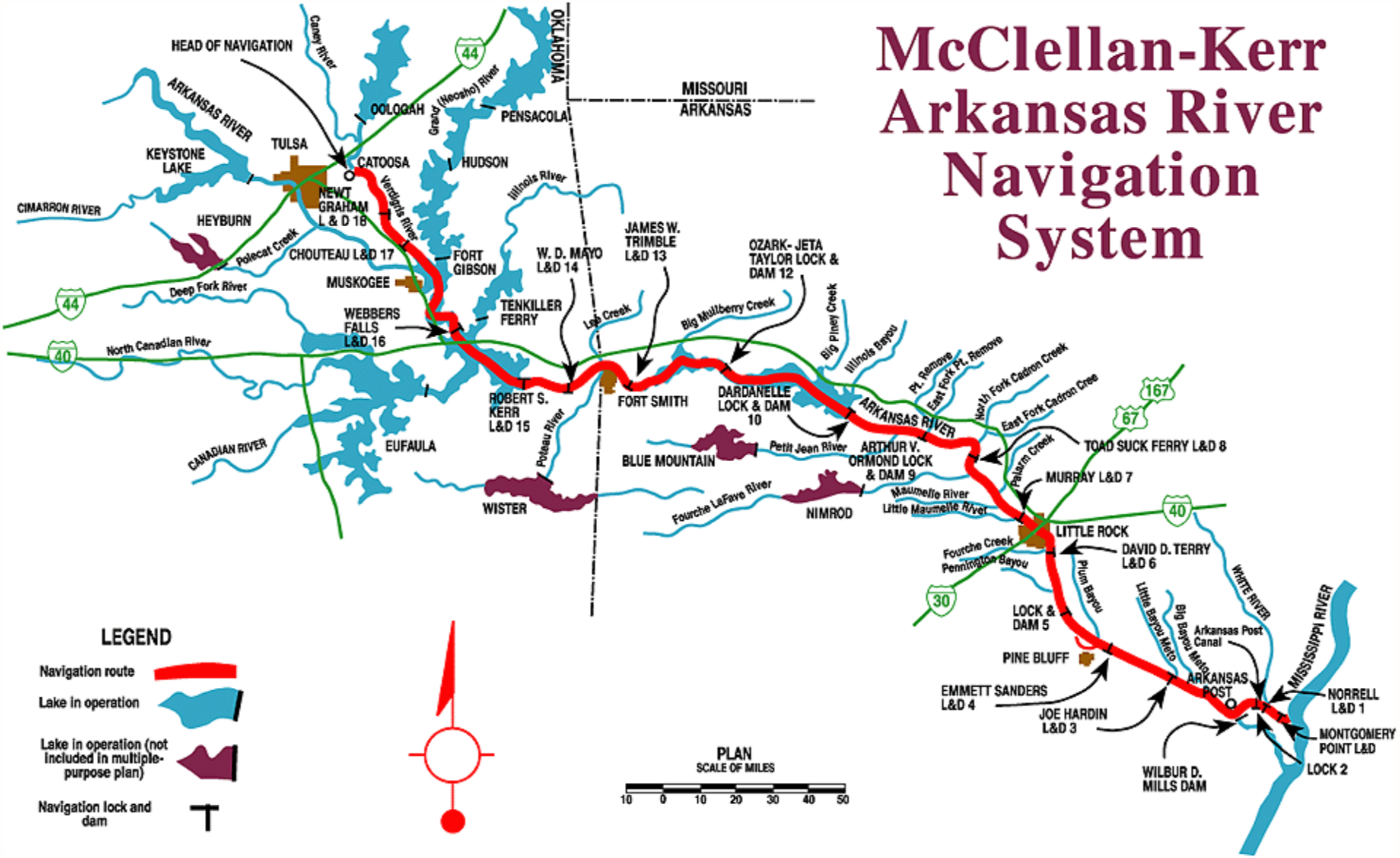

Sabine-Neches Waterway 45’ > 52’ (feasibility)
Houston Ship Channel 45’ (completed)
Texas City Ship Channel 40’ > 45’ (feasibil
Galveston Harbor 40’ > 45’ (feasibility)
Freeport Harbor 45’ > 60’ (feasibility)
Matagorda Ship Channel 36’ > 44’ (by permit)
Corpus Christi Ship Channel 45’ > 52’ (awaiting WRDA)
Brownsville Ship Channel (BIH) 42’ > 48’ (feasibility)

US Army Corps of Engineers
Galveston District

Galveston District Hurricane Lessons Learned Initiatives

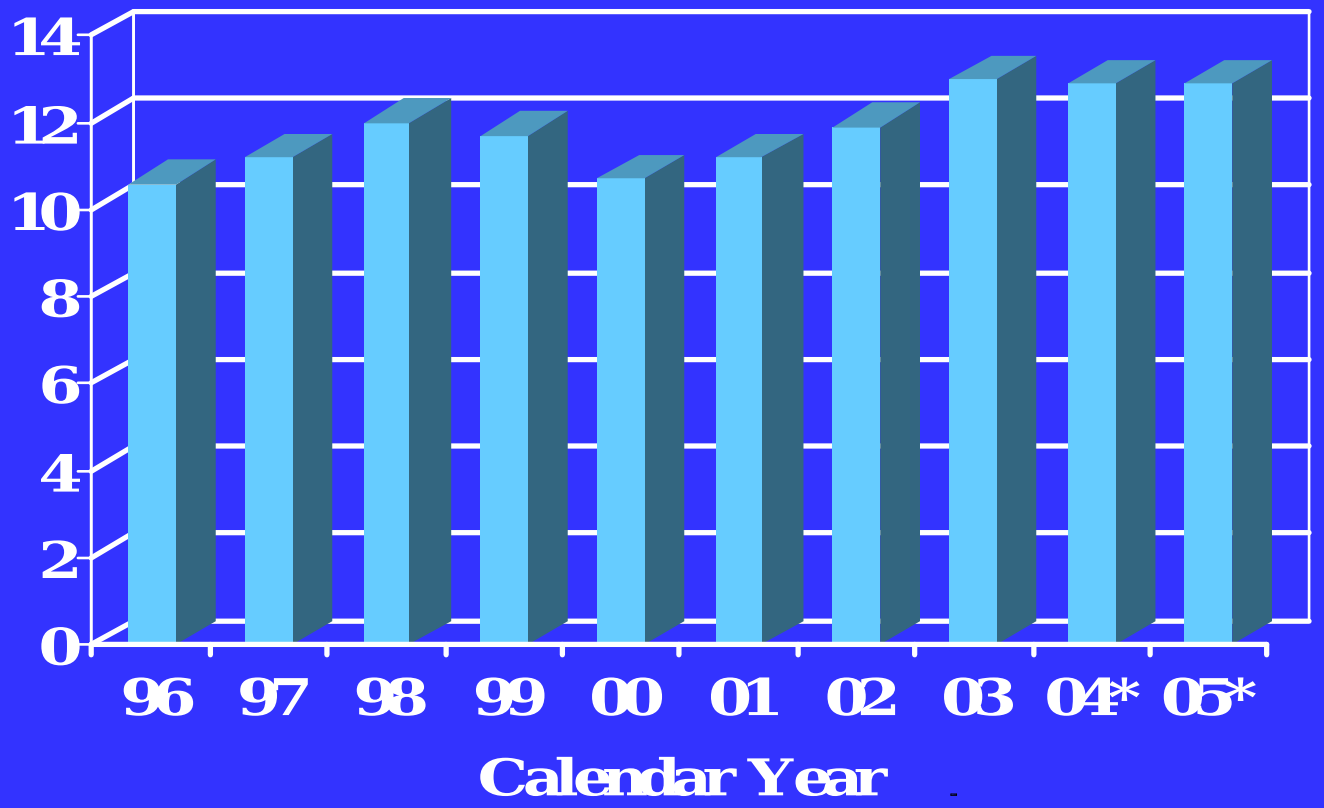
- Developing Protocol for a Gulf Coast Response to Hurricanes
- Developing an Improved Communication Plan with USCG, NOAA, Industry, and the Corps Action Team Members (CAT)
- Revising our District Hurricane Plan to Include Lessons Learned at the Field & Administrative Level
- Corps Participation in Coast Guard Port Coordination Team Meetings

McClellan-Kerr Arkansas River Navigation System



McClellan-Kerr Arkansas River Navigation System

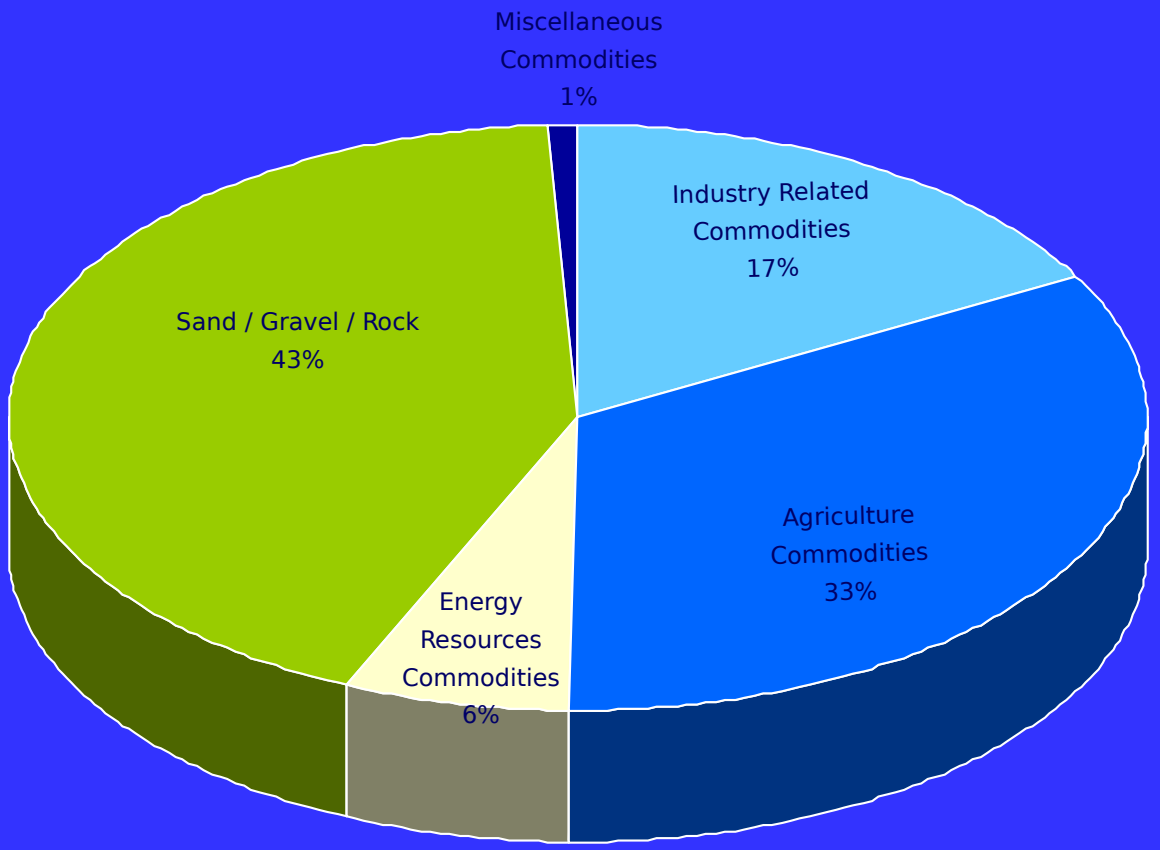
ANNUAL TONNAGES - 10 Year History



EST*

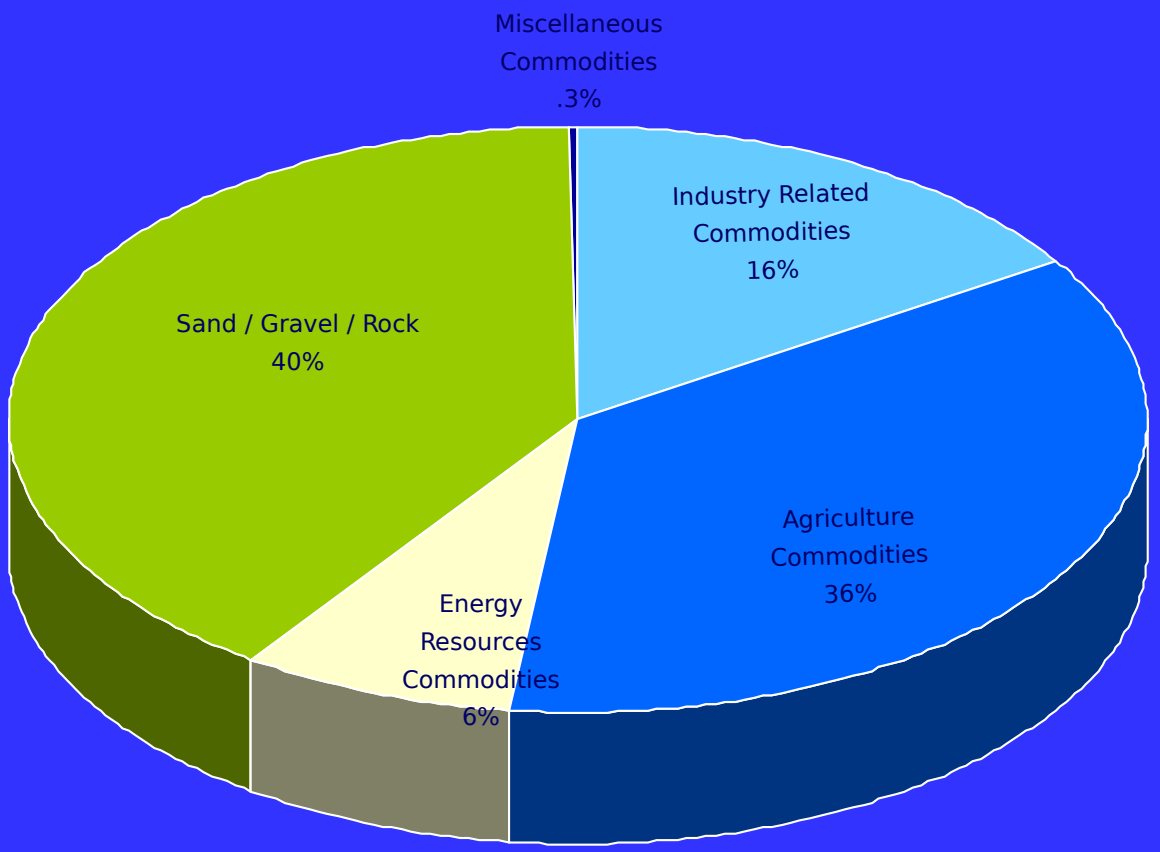
MCCLELLAN-KERR Arkansas River Navigation Syste
COMMODITY TYPES

2005 Tonnage - 12,926,289


Miscellaneous Commodities 1%
Industry Related Commodities 17%
Agriculture Commodities 33%
Energy Resources Commodities 6%
Sand / Gravel / Rock 43%

MCCLELLAN-KERR Arkansas River Navigation Syste
COMMODITY TYPES

2006 Tonnage - Jan-Apr 5,020,324


Miscellaneous Commodities .3%
Industry Related Commodities 16%
Agriculture Commodities 36%
Energy Resources Commodities 6%
Sand / Gravel / Rock 40%